



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,275	07/18/2006	John F. Schaupp	3030-200329	7750
23643	7590	12/29/2008	EXAMINER	
BARNES & THORNBURG LLP			STIMPERT, PHILIP EARL	
11 SOUTH MERIDIAN				
INDIANAPOLIS, IN 46204			ART UNIT	PAPER NUMBER
			3746	
			NOTIFICATION DATE	DELIVERY MODE
			12/29/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

indocket@btlaw.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/586,275	SCHAUPP, JOHN F.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Philip Stimpert	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 18 July 2006.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-14 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 18 July 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>4/16/2007, 4/16/2007, 7/18/2006</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .



## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “movable components defining between them a non-zero included angle,” and in fact the multiple movable components, of claims 1 and 9, as well as the multiple cam lobes of claim 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claim 7 is objected to because of the following informalities: line 2 recites “n an integer greater than 2,” in which clause “is” has been omitted. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claim 1, the claim recites “at least two of the movable components defining between them a non-zero included angle.” Given the recitation in claim 3 of connecting rods in a linkage between the crank and the movable components, the examiner can only assume that the “movable components” refer to the pistons of the pumps. However, it is not clear how these pistons define non-zero included angles, since it appears from the drawings that the pistons would be substantially parallel (Fig.

2). It is also not clear how these angles would be defined (in particular, no vertex is recited or apparently inherent from what is recited).

6. Regarding claim 3, it is unclear whether the connecting rods which couple the movable components to the crank accomplish the coupling in parallel (one throw per movable member) or in series (multiple throws per member).

7. Further regarding claim 3, the claim appears to contradict the scope of claim 1, as it refers to a singular “the crank,” whereas claim 1 appears to recite a separate crank associated with each pump.

8. Regarding claim 5, the claim recites “the other two of the at least three throws.” The limitation, “the other two” lacks antecedent basis in the claim. Furthermore, “the other two” implies that there are three and only three throws (“one” plus “the other two”) which contradicts the expressed scope of “at least three throws,” and thereby further renders claim 5 indefinite.

9. Regarding claim 9, the claim recites “a non-zero included angle” to that of claim 1. While the disclosure supports a 180° included angle between movable parts in Fig. 3, it is still unclear in the claim whether the vertex of this angle is intended to be as shown (indirectly) in Fig. 3.

10. Further regarding claim 9, the claim recites “a movable component” associated with each of a plurality of pumps, but later recites “the cam being coupled to the movable component by the at least two followers.” This is indefinite, as the number of movable components is implied to be both singular and plural, and it is further unclear in light of the disclosure how a single movable component would be coupled to the cam by multiple cam followers.

#### ***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-8, as best understood by the examiner, are rejected under 35 U.S.C. 102(b) as being anticipated by Webb (US 1,316,258).
13. Regarding claim 1, Webb teaches an assembly of multiple fluid pumps (Fig. 2), each pump including a movable component (6) and a crank (4) coupled to the movable component. The examiner believes that the drive mechanism of Webb functions in a similar manner to that of the applicant, and thus will result in a similar non-zero included angle (see Fig. 1 of Webb as compared to Fig. 2 of applicant's disclosure).
14. Regarding claims 2, 4, 6, and 8, Webb teaches that his pump is "to be used for supplying air to automobile tires but [is] capable of other uses if desired," (lines 10-12). As such, the pump disclosed by Webb is inherently capable of performing as a coating material pump.
15. Regarding claim 3, Webb teaches that the crank comprises three throws (8) and three connecting rods (see Figs. 1 and 2, throws are radial extensions of crank 4), and that the crank (4) is connected in parallel to the movable members (6) by the throws and connecting rods (7).
16. Regarding claims 5 and 7, Webb teaches three throws each defining substantially equal included angles with the other two throws (see Fig. 1), each angle being about 120° (360/3=120).

17. Claims 9-14, as best understood by the examiner, are rejected under 35 U.S.C. 102(b) as being anticipated by Benedek (US 2,697,403).
18. Regarding claim 9, Benedek teaches an assembly of multiple fluid pumps (see Fig. 5), each pump including a movable member (5), at least two of the movable members defining a 180° included angle between them (see Fig. 5), a cam follower (particularly the face of the pistons 5 which engages the cam) associated with each piston such that the respective piston engages the cam.
19. Regarding claims 10, 12, and 14, Benedek teaches that "the vital moving parts of the pump are well under pressure lubrication at all times," (col. 9, ln. 47-48). Thus, the material being pumped by Benedek is used to coat and thereby lubricate the working surfaces of the pump, and the pump of Benedek may be considered to constitute coating material pump.
20. Regarding claim 11, Benedek teaches that the cam is configured to drive the pumps such that one of the pumps reaches the beginning of an exhaust stroke at substantially the same time that another pump reaches the beginning of a priming stroke (see Figs. 7 and 19-22).
21. Regarding claim 13, in Figs. 9-11, Benedek teaches 3 cams each having 2 lobes with non-zero angles between lines drawn between the lobe peaks of each cam.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Stimpert whose telephone number is (571)270-1890. The examiner can normally be reached on Mon-Fri 7:30AM-4:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/  
Supervisory Patent Examiner, Art  
Unit 3746

/P. S./  
Examiner, Art Unit 3746  
16 December 2008